# GRAPHICAL WEB BASED TOOL FOR GENERATING QUERY FROM STAR SCHEMA

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**UNIVERSITI UTARA MALAYSIA**
**2009**

# GRAPHICAL WEB BASED TOOL FOR GENERATING QUERY FROM STAR SCHEMA

A thesis submitted to the Graduate School, College of Arts and Sciences in partial fulfilment of the requirements for the degree Master of Science (IT)

Universiti Utara Malaysia

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# ABSTRACT

Novice users have difficulty to generate structured query language from the star schemas because they are not familiar with formulating SQL queries and SQL syntax. This study proposed graphical web based tool to generate queries from star schema and represent the data in tabular or graphical forms which help novice user to formulate SQL query. A prototype for a web based tool to generate the query has been developed using Java Server Pages programming language. The developed tool can facilitate complex query construction which is faced by non-technical and/or novice users. The output of SQL query is presented in tabular and graphical forms which can help users especially top management in better understanding and interpreting query results.

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## ACKNOWLEDGEMENTS

First, I would like to express my appreciation to Allah, the most merciful and, the most compassionate, who has granted me the ability and willing to start and complete this study. I do pray to His Greatness to inspire and enable me to continue the work for the benefits of humanity.

After that, my most profound thankfulness goes to my supervisor Prof Ku Ruhana Ku-Mahamud for her scientifically proven and creativity encouraging guidance and great support in this study.

Last, I wish to thank my Father, Mother who were always there for me by giving everything they have, my brothers and sisters for their love and support.

Thank you UUM.

Mohammed F.R Anbar

April 12, 2009

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| | |
|---|---|
| SQL | Structured query language |
| OLAP | On-line analytical processing |
| OLTP | Online transaction processing |
| HTML | HyperText Markup Language |
| IDE | Integrated Development Environment |
| JSP | Java Server Pages |
| DW | Data warehouse |
| NL | Natural language |
| SQUARE | Specifying Queries as Relational Expressions |
| TRC | Tuple relational calculus |
| DDL | Data definition language |
| DML | Manipulation language |
| DBMS | Database management system |
| RDBMS | Relational Database Management system |
| RUP | Rational Unified Process |
| UML | Unified Modeling Language |
| WWW | WORLD WIDE WEB |
| HTTP | Hyper Text Transfer Protocol |

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# CHAPTER ONE

# INTRODUCTION

Database applications which are deployed in many corporations for the purpose of storing and retrieving data in a structured way has become ubiquitous and indispensable. Many transactions are being performed by users daily. These transactions represent the questions asked by users in the natural language which are formulated as structured query language (SQL) to deal with database. The ways of formulating queries depends on user knowledge and experience. Ultimately, the output of queries represents the answers to user questions.

A query language is a specialized language in which a user requests information from a database. These are typically of a higher-level than programming languages. They are classified in to two types, procedural and non procedural. Procedural is where the user instructs the system to perform a sequence of operations on the database. That will compute the desired information. Nonprocedural is where the user specifies the information desired without giving a procedure in obtaining the information. A complete query language also contains facilities to insert and delete topples as well as to modify parts of the existing topples.

Most of data set which represents the outputs of SQL query are presented in the form that users take a lot of time in browsing the data. This makes the users uneasy

The contents of the thesis is for internal user only

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